

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (PREVIOUSLY AMENDED) A magnetic circuit for a rotating apparatus having a parallel structure or a skew structure of magnet pole pieces of magnets or armatures with respect to a shaft, comprising:

a rotating shaft;

a plurality of supporters fixedly mounted in a perpendicular direction to the circumference of the rotating shaft;

a rotor having a plurality of magnets rotated by attraction force and repulsion force of a magnetic field, each magnet having a magnet pole piece being arranged in parallel with respect to the shaft and located on an end of one of the plurality of supporters; and

a plurality of armatures (stators) each having a coil, each coil being mounted at an interval outside the rotors and receiving induced magnetic flux of the rotors, and said magnet pole pieces being arranged in parallel or in skew with the rotating shaft.

3. (PREVIOUSLY AMENDED) The magnetic circuit for a rotating apparatus as claimed in claim 1, wherein the armatures have the parallel structure or the skew structure of magnet pole pieces of magnets or armatures with respect to the shaft, and the magnets or armatures are C-shaped.

5. (PREVIOUSLY AMENDED) The magnetic circuit for a rotating apparatus of claim 1 wherein the magnet pole pieces of the magnet or the armatures having the parallel structure or the skew structure with respect to the shaft and the rotors being rotated by a force of a magnetic field formed in the parallel direction with the rotating shaft and thus minimizing the lateral vibration of the shaft under rotation.

7. (PREVIOUSLY AMENDED) An electrical apparatus comprising:
a shaft having an axial direction and a radial direction;
a plurality of supports extending radially from the shaft;
ends of each support having a pair of magnets mounted thereto, each pair containing magnets of opposite polarity, each magnet having pole faces extending parallel to the axial direction of the shaft;
a plurality of arcuate stators surrounding the shaft, each stator having a leg with a coil attached thereto and ends that mutually face each other to define a gap through which the pairs of magnets rotate; and
adjacent magnet pairs having magnetic polarities which are reversed with respect to each other.